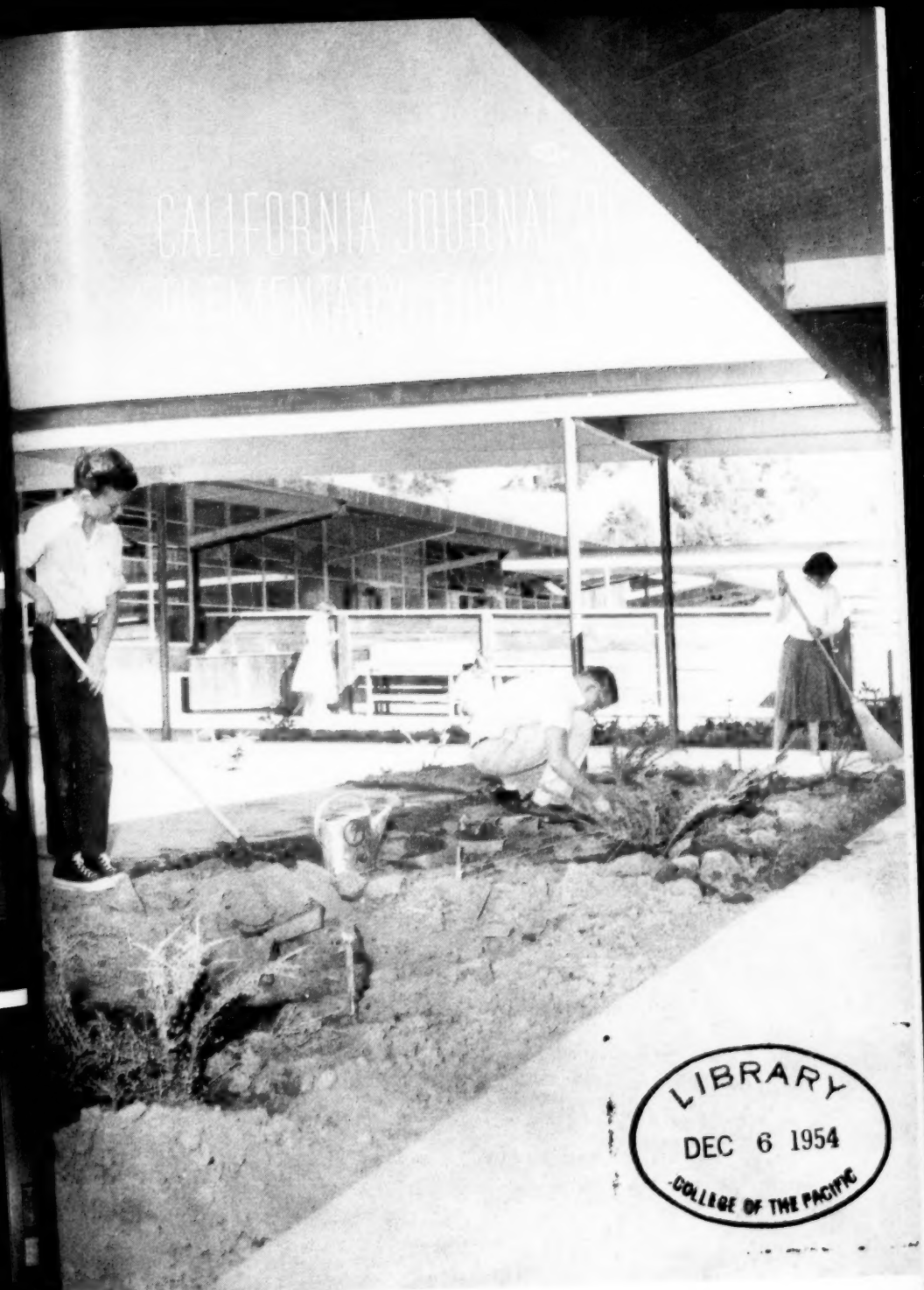

TDOOR ACTIVITIES IN AN OUTDOOR CLASSROOM
TIERRA LINDA SCHOOL. SAN CARLOS ELEMENTARY
HOOL DISTRICT

NOVEMBER, 1954

CALIFORNIA JOURNAL OF ELEMENTARY EDUCATION

VOLUME XXIII NOVEMBER, 1954 NUMBER 2

The California Journal of Elementary Education is published quarterly in August, November, February, and May by the California State Department of Education. It is distributed without charge to school officials in California primarily concerned with the administration and supervision of elementary education and to institutions engaged in the training of teachers for the elementary school. To others the subscription price is $1.00 a year; the price for single copies is 30 cents. Subscriptions should be sent to the Bureau of Textbooks and Publications.

Entered as second-class matter September 13, 1932, at the Post Office at Sacramento, California, under the Act of August 24, 1912.

CONTENTS

Health Education in California Public Schools

		Page
Editorial Comment and News Notes		65
Health Education—A Point of View	*Bernice Moss* and *Patricia Hill*	71
A Healthful School Environment	*Frank B. Jones*	78
Finding Children's Health Needs	*Ethel Tobin Bell*	89
The Value of Health Inventories Filled Out by Parents	*Charlotte Singer Brooks*	95
Health Without Fear	*Arthur H. Parmelee*	105
Growing Pains Need Attention	*Inga C. McDaniel*	109
A School-Community Dental Program	*Edith Lindly*	121

EDITORIAL COMMENT AND NEWS NOTES

This Issue of the Journal

This issue of the *California Journal of Elementary Education,* devoted to health education in the elementary school, is the work of professional personnel in the fields of health education and health. The introductory article, "Health Education—A Point of View," by Bernice Moss and Patricia Hill, sets the keynote of the issue with the statement—"the goal of health instruction is to help the child to develop attitudes and follow practices that will help him to live healthfully and take responsibility for his own health and that of others."

The importance of a healthful school environment to children's health is told by Frank B. Jones, Assistant Professor of Health and Physical Education, Sacramento State College, in "A Healthful School Environment." School layout, lighting, sanitary facilities, playgrounds all have a bearing on children's health, he points out. Charlotte Singer-Brooks, M.D., Medical Officer of the Bureau of Maternal and Child Health, California State Department of Public Health, is the author of "The Value of Health Inventories Filled Out by Parents."

Health education should stress the elimination of undue fear of disease and injury, says Arthur H. Parmalee, Jr., M.D., Instructor, Department of Pediatrics, School of Medicine, University of California Medical Center, Los Angeles, in "Health Without Fear." Dr. Parmalee writes from his experiences as school physician at University Elementary School, Los Angeles. His definition, ". . . health is the ability to live with the optimum amount of independence, creativeness, and satisfaction with or without disease, injury, or deformity," is one to remember.

Other articles in this special health education issue are "Finding Health Needs of Children," by Ethel Tobin Bell, Assist-

ant Professor of Health Education, University of California, Los Angeles; "A School-Community Dental Program," by Edith Lindly, Associate Professor of Health Education, Fresno State College, and Edwin C. Kratt, Superintendent, Fresno City Unified School District; and "Growing Pains Need Attention," by Inga C. McDaniel, Consultant in Guidance.

Proposed Revisions of Credential Requirements for School Nurses Are Released

The committee appointed in 1951 by the Superintendent of Public Instruction to revise the requirements for the Health and Development Credential for School Nurses has released the outline of credential requirements and pattern of preparation it is proposing.

As a first step in revising requirements for this credential, the committee directed the preparation of a questionnaire titled "Study of School Nurses in California: Their Preparation, Duties, and Responsibilities" to collect data the committee wished to use as a basis for its recommendations. This questionnaire was sent to approximately 1,550 school nurses in California. Of this number, 1,236 completed and returned it to the committee. Only 12 of those returned were incomplete and unusable. Funds for tabulating the results by mechanical means were provided by the Rosenberg Foundation. On the basis of the results of this study and of an additional interview-type study made in the San Francisco Bay area and reported to the committee, the proposed requirements were drafted.

A printed bulletin describing the work of the State Committee, the studies made, the conclusions drawn, and the proposed credential requirements and pattern of preparation of nurses for public school service is being distributed to schools throughout the state. Personnel interested in the school health program and the preparation of school nurses are asked to read the bulletin and recommend any changes they believe are necessary. The committee will study the recommendations before it completes the pattern of requirements and presents them to the Commission of Credentials.

Teacher's Guide in Health Education for Elementary Schools Now in Preparation

A teacher's guide in health education for elementary schools is being prepared under the leadership of the State Department of Education. The guide is designed to help teachers from kindergarten through grade eight and will cover such topics as the school health program, characteristics and developmental needs of the elementary school-age child and their implications for health education, and methods of organizing learning experiences in health. Specific health topics such as nutrition, safety, emotional and social health, prevention and control of disease, and personal appearance will be discussed and learning experiences suggested. Decision to develop the guide was based on requests for help in health instruction by teachers and administrators in elementary schools.

A steering committee for the work involved in collecting the material needed and preparing the manuscript has already gone into action. The members of this committee are Mrs. Gladys L. Potter, Deputy Superintendent, Long Beach City Unified School District; Mrs. Zoe Conn, formerly Co-ordinator of Health, La Mesa-Spring Valley Elementary School District; Mrs. Ferne Hood, Co-ordinator of Health, office of the Los Angeles County Superintendent of Schools; Mrs. Alice Krehbiel, Curriculum Consultant, office of the San Bernardino County Superintendent of Schools; Evelyn Erickson, Consultant, Nursing Services, office of the Orange County Superintendent of Schools; Edward Johns, Associate Professor, Health Education, University of California, Los Angeles; Charlotte Singer-Brooks, M.D., Medical Officer, Bureau of Maternal and Child Health, California State Department of Public Health. Staff members of the California State Department of Education serving on the steering committee are Mrs. Ester Nelson, Consultant in Elementary Education, and Patricia Hill, Consultant in Health Education.

At its first meeting the steering committee set up a framework for the guide and decided to ask local groups throughout

the state to develop sections of it. Several groups are working on material for various sections and three groups have produced material in first draft form. The steering committee plans to submit material produced to date to selected school districts this fall to obtain their evaluation and suggestions concerning it. Districts interested in evaluating the first draft sections may contact Patricia Hill, Consultant in Health Education, State Department of Education, for copies. Sections completed at this time are those on "Characteristics and Developmental Needs of the Elementary School-Age Child and Implications for Health Education," "Emotional and Social Health," and "Food and Nutrition."

After the various sections for the guide are evaluated, they will be rewritten and edited for publication in the guide. Plans have been made to publish the guide during the 1955-56 school year.

New Chief Named to Supplemental Services in the State Department of Education

Donald E. Kitch, Chief of the Bureau of Guidance since 1947, has been appointed Chief of the Supplemental Education Services Section of the Division of Instruction. During the past year Louis E. Means, formerly Consultant in School Recreation, has served as Chief of Supplemental Education Services on a temporary assignment. Mr. Means is now a staff member in the Bureau of Secondary Education.

In his new position Mr. Kitch will be responsible for co-ordinating the activities of five units in the Division of Instruction, namely, the bureaus of (1) Adult Education, (2) Audio-Visual Education, (3) Guidance, (4) Health Education, Physical Education, and Recreation, and (5) Special Education.

Before joining the Department of Education staff, Mr. Kitch was co-ordinator of secondary education in the office of the Contra Costa County Superintendent of Schools for six years, was a teacher and counselor at Ventura Junior College, and served for eight years as superintendent of schools at St. John, Kansas. He is a graduate of Southwestern College, Winfield,

Kansas, and of Northwestern University, Evanston, Illinois. He has carried on doctoral study at the University of Chicago and the University of Southern California. Mr. Kitch has served as president of the National Association of Guidance Supervisors and as a member of the editorial board for the *Personnel and Guidance Journal.* At present he is president of the American Personnel and Guidance Association.

Regional Conference of National Science Teachers Association at Berkeley in December

Programs designed to cover the full range of natural and physical sciences from the elementary to the high school levels have been prepared for the regional conference of the National Science Teachers Association, to be held in Berkeley, California, from December 27 to 29, 1954. The meetings will be held in conjunction with the first meeting of the American Association for the Advancement of Science ever to be held west of the Rockies.

Under the general chairmanship of Robert Stollberg, of San Francisco State College, and the local chairmanship of Eugene Roberts, of the San Francisco Public Schools, the three-day program has been divided as follows: December 27, The Role of Science in the Education of Youth; December 28, Some Problems Science Teachers Must Solve; December 29, Recent Research in Science Education—What It Means to Science Teachers.

The Co-operative Study in Elementary Education

The California Elementary School Administrators Association has received an additional grant from the Rosenberg Foundation to extend the Co-operative Study of Elementary Education through 1955. The purpose of the study is to identify the services needed for an adequate program of elementary education in California. It is referred to as a co-operative study because both lay and professional people are involved in the development of topics connected with the study.

Lewis Wickens has resigned as executive secretary of the study to give full time to the direction of elementary education in the Riverside Public Schools. Those who have been associated with Mr. Wickens in the study during the past two years view with regret his resignation and extend their sincere appreciation to him for his enthusiastic efforts to bring the study toward a successful conclusion.

Mr. Wickens will be succeeded as executive secretary by Glenn Barnett, Associate Professor of Education, University of California, Berkeley. Dr. Barnett is well known for his contributions to elementary education in California and the nation. Among his accomplishments is participation in the Educational Policies Commission study of education reported in *Education for All American Children*. Dr. Barnett has recently completed a nation-wide tour, visiting 143 schools including those visited during the original Educational Policies Commission Study.

Dr. Barnett will be assisted by Caseel Burke. Edgar Morphet, Professor of Education, University of California, Berkeley, is continuing service to the Association in a consultative and advisory capacity.

The results of the study are to be published in the twenty-seventh yearbook of the California Elementary School Administrators Association and in a separate bulletin designed for wide distribution.

Cover Illustrations

The front cover of this issue shows pupils of Tierra Linda Elementary School, San Carlos Elementary School District, working in their outdoor classroom. Various phases of health education are shown in the pictures on the back cover. The need of living things for light, air, and nutrition is studied by a pupil in a Monterey elementary school (top picture). Pupils in the Montecito elementary school record science facts on charts (middle picture). The importance of healthful physical activity is portrayed in the shuffleboard play at a Los Angeles public school (bottom picture).

HEALTH EDUCATION—A POINT OF VIEW

BERNICE MOSS, *Professor of Health Education, University of Utah,* and PATRICIA HILL, *Consultant in Health Education, California State Department of Education*

School life presents many opportunities for education in health. Children—eager, reluctant, curious, cautious—come to school. All are similar in many respects, yet each one differs from all others. The help children are given in solving their health problems and in adjusting to the group, the conditions under which they live in school, and the understanding they acquire of themselves as living organisms have a decided effect upon the health attitudes they acquire and the practices they employ. The development of attitudes and the acquisition of behavior conducive to healthy, happy, and successful living are goals that the school must help each child to attain.

Health is much more than freedom from annoying pain or personal inconvenience. A body that functions well and recovers quickly from fatigue, a mental outlook with which to meet the challenges of living with confidence and poise, and social fitness that makes it easy to get along with oneself and with others are some of the characteristics possessed by children and adults who are healthy.

Health is the result of hereditary and environmental influences and the quality of living. It is not accidental. Medicine may be helpful in preventing or treating illness, but it does not develop health. Health cannot be purchased in a container or secured by the use of a hypodermic needle. To develop a nation of people who have optimum health, teachers must help girls and boys to understand that it is just good sense to make use of the scientific facts of healthful living.

Health has been an objective of education for many years. During these years the school's interest in health has progressively increased and broadened. New school plants usually pro-

vide a safe and healthful environment. With adequate health services and a high degree of co-ordination between home, school, and community resources, the health program can be made strong.

Health education—the process of providing learning experiences for the purpose of influencing knowledge, attitudes, and conduct relating to individual and group health—is taking an increasingly important place in the curriculum. However, many questions still arise in connection with the health program—what should be taught about health, on what should emphasis be placed at each of the grade levels, how should health instruction be employed in the curriculum, and what types of instruction in health will most likely cause girls and boys in the elementary school to acquire good health habits and to follow good health practices?

Health education is an applied science that draws heavily upon scientific and social disciplines. Health is biological in that it is a condition that develops from optimum functioning of the biological organism. To meet the biological needs of the organism it is essential to understand and apply scientific principles relating to food, activity, rest, light, and temperature. To survive, the organism must be protected from injury, disease, and harmful substances such as drugs and alcohol. Health is psychological in that the organism has drives that govern its behavior, behavior that involves physical, emotional, and intellectual facets. The psychological needs of children must be met. Love, security, recognition, and a feeling of worth are important factors in health. Health is sociological in that man is a social animal and lives in groups. Certain environmental controls must be kept operative if man is to survive. Maintenance of sanitation, control of disease, and provision of adequate housing are examples of activities that must be carried on where people live in communities. Home, school, community, and world health are important to the progress of man.

The health education needs of children vary according to many factors. The developmental needs are inherent in the maturation process. The social and cultural backgrounds of chil-

dren help to determine and differentiate health needs. The previous experiences of children, their health behaviors, and their health status must all be taken into consideration in the planning of health instruction. A study of the health needs of any particular group of children is an essential step in planning their health education experiences.

Emphasis of Health Education at Various Grade Levels

In the kindergarten and primary grades the health teaching program should be centered on helping children to live more healthfully at home and at school. Health concepts presented should be simple and related to children's experiences. Desirable behaviors and good attitudes toward health are primary objectives of health instruction. Appropriate emphasis includes provision for the development of healthful daily routines such as good eating practices, using safety skills, following good practices regarding cleanliness and disease prevention, and learning to live happily at home and school.

In the intermediate grades children begin to need and want more of the "whys" of health behavior. They are interested in and especially curious about themselves and the world around them. Throughout the health program for these grades emphasis on the development of desirable attitudes and practices should be maintained, and the program should be expanded to include instruction regarding the nature and functions of the human organism and disease and its control. There should be opportunities also in the program for children to explore the community in order to become acquainted with local health problems and health services.

Children in the upper grades are primarily concerned with themselves and the changes that are occurring as they enter the period of adolescence. They are puzzled by their feelings and wonder what might be causing them. Their concern for group acceptance makes it necessary for the school to help them solve problems they may have dealing with skin conditions, size or figure, lack of athletic skill, and social conduct. Further, they

must be helped to establish themselves with parents and other adults on a level that differs considerably from that of their earlier childhood.

The goal of health instruction is to help the child develop attitudes and follow practices that will help him to live healthfully and to take responsibility for his own health and that of others. Planning curricular content and specific activities for each grade level and for different groups requires careful work. The health education program for the elementary school can be furthered in a variety of ways. Health can be taught through example by the teacher living healthfully throughout the school day. The teacher may also capitalize upon interest-arousing events as they come up, may correlate or integrate health with instruction in various subjects whenever timely or appropriate, and may center learning activities on particular health problems.

Integrating Health with Units of Instruction

Instruction in the elementary school is generally planned in relation to broad topics rather than to specific subjects. Reading, writing, arithmetic, health, science, art, music, social studies, and citizenship are considered as interrelated parts of broad learning experiences. Units of instruction used in a program of this type deal with topics such as "Life on a Farm," "Home and Family Living," "The Dairy Farm," and "Life in Our Community." Many opportunities for health experiences occur in the development of such units. Teachers must therefore be aware of the health implications of the topic under consideration and be ready to build upon the health interests expressed by children as they participate in the units.

Correlating Health with Other Subjects

Many opportunities exist for correlating instruction in health with that of the social studies, science, art, language arts, and physical education. In art, children can prepare posters, puppets, displays, and exhibits relating to the health problems they are studying. In science, discussions of the way plants and

animals grow and develop may supplement health instruction. In physical education the safety aspects of play, as well as matters of posture, may be emphasized to further the health program. In social studies the services of the public health department and voluntary health agencies may be considered. By making the health program an integral part of the total program of education, health instruction is strengthened and helps to strengthen other parts of the program.

Capitalizing Upon Interest-arousing Events

Certain incidents that arise unplanned have tremendous interest value in the health education program—an accident on the school grounds, an epidemic of measles, a visit from a former student now an outstanding athlete. These are "teachable moments" and should be utilized. When interest is at a high pitch discussions are highly meaningful, reference materials become increasingly significant, and expert opinion is valued highly.

Teaching health through living healthfully in school, through integrating health instruction with that of other units, and teaching health in relation to incidents such as accidents should be accompanied by other instruction in health in order to make the program sufficiently well rounded to meet all the children's needs. Many aspects of healthful living, many decisions to be made, many ways of behaving are not actual parts of school activities, such as the time one goes to bed or the kind of breakfast one eats.

The teacher in the elementary school should have available whatever time he needs to conduct a health education program. When scheduling time for health instruction, adequate provision should be made for emphasizing things that will actually bring about improved health attitudes and practices. The time element is important only insofar as it allows a chance for constructive learning activities. Generally the teacher will find "blocks" of time needed to develop the program desired rather than daily periods. At times the study of a health unit will occupy much of the daily schedule and take several days

to complete. The amount of time devoted to the health unit should be adequate for the development of learning activities planned to meet the children's needs.

Methods of Teaching Health

Methods of instruction that can be used successfully in one phase of the school program can generally be used with equal success in health instruction. Health instruction does not involve a magic formula, special gadget, or device. Children and teachers must identify their problems involving health, seek the information they need to solve their problems, and utilize their conclusions as a basis for modifying their behavior. Good teachers will use a variety of methods and activities to carry out these steps—reading, discussion, demonstration, dramatization, skill development, experimentation, field trips, use of audio-visual aids, and interviews. As the work progresses the teacher must constantly ask himself if the desired objective is being attained—is each of the children getting correct concepts of health, developing appropriate attitudes regarding health, and following health practices he is learning about?

Children's interest in learning about and following good health practices should stem from their desire to do well the things they like to do, to be acceptable and attractive to others, and to have a sense of well-being. Material rewards for contests won will not help to develop interests of the type needed. Such interests evolve as the result of children's inner urges. The use of material rewards is not the only practice that should be avoided in the health program. Other practices that should be excluded are indicated by the following questions. Do you hold children responsible for health conditions over which they have no control? Have you used fear of illness or disability as a motivator of behavior? Do you use competition in health practice or health status, or give extrinsic rewards? Do you combine fact and fancy in such a way that the child is unable to distinguish between them? Are you rigid in your application of health standards to behavior or do you recognize that individuals differ? Are you sure that you are teaching scientific facts

rather than a pet prejudice? Do you violate acceptable health practices yourself?

The most important factor in a good program of health is a teacher who has a health awareness and a good background of information regarding health. Such a teacher will find many ways to make the school experiences of children meaningful in relation to their health needs. She will be a good teacher of health and a living example of the buoyancy that health can bring to life.

A HEALTHFUL SCHOOL ENVIRONMENT

FRANK B. JONES, *Assistant Professor of Health and Physical Education, Sacramento State College*

The environment of the school has a decided effect upon the health of the children enrolled. Every one of them is markedly influenced by the physical, social, and emotional aspects of the educational picture. The extent of this influence upon children's health and learning is unquestionably very great for most children attend school at least five hours a day, five days a week, and thirty-five weeks a year.

The school environment also has an effect upon the operating efficiency of the school. A building planned in compliance with a sound educational program and appropriately equipped is essential. The playgrounds should be equipped to provide a well-rounded activity program for all children. The educational program should be planned and organized to benefit all members of the community. Co-operative working relations between administrators, teachers, staff, pupils, community agencies, parents, and others should be developed to insure the success of the educational program. When the environment contains these provisions it is conducive to the development of the maximum health of those working in the school. It will afford the opportunity to each child to develop at a rate and to a point commensurate with his ability.

THE PHYSICAL ENVIRONMENT OF THE SCHOOL

The School Site. The school site should be located near the center of population to be served. It should be easily accessible to both foot and vehicle traffic. The site should be chosen in an area that is free from noise, heavy auto or truck traffic, odors, and gases. Too frequently schools have been located near railroad tracks, on busy highways, or even at the end of airport

runways. The chosen school site should enable the school to utilize such public service facilities as gas, water, sewer, telephone, electricity, and fire protection.

Modern schools require larger sites than were required by schools a generation ago. The operation of modern programs of education requires more space than was needed for conducting the formalized programs they replaced, and increased use of school facilities by community groups has helped to create need for large school sites. In the Twenty-seventh Yearbook of the American Association of School Administrators the following statement regarding school sites emphasizes the importance of a school site being adequate for conducting the school program and indicates the size of sites needed for schools with specified enrollments.

> The size of any school site should be determined by the nature and scope of the contemplated educational program. . . . The following site areas are suggested as a minimum: (a) For elementary schools, five acres plus an additional acre for each one hundred pupils of ultimate enrolment. Thus an elementary school of two hundred would have a site of seven acres. . . .[1]

The School Buildings and Grounds. Throughout California one finds many kinds of elementary school buildings. Among them are frame, brick, stucco, and concrete buildings. Certain of the buildings were constructed when formalized programs of education were the order of the day. The new buildings differ considerably from the old buildings in that they provide the facilities necessary for operating a modern program of education.

The new buildings are arranged to take advantage of recent developments that are conducive to health. They are designed along modern architectural lines that are pleasing to the eye. When planning a new school, the educational plan for the district should be determined and then the school designed to fit the plan. The school administrators, teachers, and medical ad-

[1] *American School Buildings.* Twenty-seventh Yearbook of the American Association of School Administrators. Washington 6: American Association of School Administrators, 1949, p. 75.

viser and the architect should work together in planning the school so that it will be conducive to the health of every child attending it.

The safety, comfort, and health of pupils, teachers, and others who will use the buildings should be of primary concern. Lighting, heating, and ventilation should be in accordance with best practice. The plant should be cheerful, attractive, and pleasing. Schools are being painted with much more thought to the effect of colors upon the health of the pupils. The outside colors usually chosen are the "cool" colors since they are more pleasing to the eye. The cool colors include blue, blue-green, lime, and light green in various shades.

Since children live, work, and play within the classroom for many hours, it is important to provide them with light, cheery rooms. The colors used to decorate the rooms should blend and reflect rather than absorb light. White or cream ceilings used with various combinations of orchid, pink, blue, and green walls will produce the desired effects. Asphalt tile with earth colors predominating is highly satisfactory for floors.

Landscaping enhances the beauty of a school. Trees, plants, and shrubbery help to absorb noise that would interfere with activities of the school. Perennial vines may hide or mask unattractive objects. Shrubbery should, however, always be planted where it will not interfere with natural light reaching the classrooms.

Each school should have a "Site Utilization Development Plan" that provides for the construction of physical education, community, and school recreation facilities as rapidly as need for them arises. This plan should provide areas for fixed equipment and various activities. In following the plan, consideration should first be given to physical education, then to school recreation including noon-hour play, supervised play before and after school, and then to community recreation.

Separate play areas for each age group should be provided and equipped with apparatus of suitable size and design. These areas should be planned so that space is provided for giving instruction in all types of physical activities. The areas should

be planned so that they can be used for regular curriculum activities as well as for noon and after-school recreation. The play area should be as close as is practical to the classrooms of the children who use them. Kindergarten and primary play areas should, in particular, be immediately adjacent and easily accessible to the kindergarten and primary classrooms so that activities indoors and outdoors are not separated by great distances.

All playground equipment should be checked frequently for wear. Dangerous equipment should be replaced immediately. One piece of equipment that has proved to be dangerous is the merry-go-round. Young children have poor equilibrium, little strength, and small hands. They have difficulty in holding on to a rapidly spinning merry-go-round. Wooden seats for swings are also dangerous and should be replaced by leather or fabric seats.

The school water supply should be from a safe source. All schools using wells should have the water tested at regular intervals and take such steps as are necessary to keep the water pure. Drinking fountains located in corridors should be recessed to help eliminate accidents and aid the flow of traffic. Some schools now provide fountains in each classroom. Water should be ejected upward from the side of the fountains at about a 45-degree angle. Waste water containing harmful bacteria is then prevented from contaminating the fresh water source. The bubblers should have a guard to prevent the lips from touching it. The pressure should be adequate to cause a good stream of water to flow.

The toilet rooms for the school should be easily accessible from both inside the buildings and from the playground. For pupils from 5 to 7 years of age, toilet facilities should be provided in connection with each classroom. The American Association of School Administrators recommends that one toilet fixture be provided for each 30 girls and that one toilet fixture be provided for each 60 boys and one urinal for each 30 boys.[2]

[2] *American School Buildings.* Twenty-seventh Yearbook of the American Association of School Administrators. Washington 6: American Association of School Administrators, 1949, p. 163.

Wash basins should be in each toilet room, one fixture for each 50 pupils. They should be placed where the pupils must pass them in leaving the toilet rooms. Adequate soap, hot and cold water, and paper towels should be provided.

The Classroom. A number of physical factors within the classroom play definite roles in fostering and promoting health. Careful attention must be paid to these factors if the pupils are to receive full benefits from the education offered.

Good ventilation is essential. One purpose of ventilation is to remove heat from the body at the proper rate. Humidity, control of temperature, and the movement of air are the three factors that must be considered. Each school should determine how best to meet this need.

Temperature control is closely allied to ventilation. Overheated classrooms tend to reduce the efficiency of the pupils, lower their resistance to colds and other respiratory infections, and cause lethargy. The temperature within the classroom should be maintained between 68 and 72 degrees Fahrenheit. Other recommended temperatures include 65 to 70 degrees Fahrenheit for lunchrooms, 70 to 75 degrees Fahrenheit for toilet and shower rooms, and 55 to 65 degrees Fahrenheit for gymnasiums. These temperatures should be checked periodically and the needed adjustments made.

The quantity and quality of light in the classroom are very important. Quantity of light is easily measured in terms of foot-candles by a light meter. For ordinary tasks within the classrooms 30 foot-candles of light is generally considered adequate. For shop work, art, sewing, typing, and other types of precision work, 50 foot-candles of light is needed. Auditoriums, storerooms, and other places where vision is not of primary concern 5 to 10 foot-candles of light may be provided.

Inadequate light, decided changes in light, and glare are health hazards from which the classroom should be kept free. There are a number of factors that control the quality of light. Adjustments must be made to obtain the best possible lighting under the circumstances. Glare is one of the major problems in the classroom. Glare caused by uncontrolled sunlight must

be eliminated or controlled to protect children's health and to assure them opportunity to work with maximum efficiency. In certain classrooms children seated next to the windows may be subjected to so much glare as to cause serious health problems. Some of the signs the alert teacher may observe to determine when light is proving harmful to children's vision are heads tilted to avoid glare, squinting of the eyes, complaints of headaches, and gradual deterioration of work as the day progresses. Shades, light traps, and other devices may be used to help control glare. The primary purpose of these devices is to diffuse light evenly throughout the room. Also, to prevent children from having eye strain, glossy surfaces and sharp contrasts in color should be eliminated and old blackboards should be replaced with green or brown chalkboards.

The type of lighting fixture used in the room contributes to the quality of artificial light provided. Regardless of the type of fixture used, the light should never shine directly upon the work surface. The recommended lighting for classrooms is a type of indirect lighting known as "luminous indirect." The lamp is surrounded by an opaque or slightly translucent shield open at the top, or by concentric ring louvres, so that 90 to 100 per cent of the light is reflected upward. This type of lighting is most desirable in quality. The sectional type of fixture used below fluorescent lamps helps to eliminate glare and has proved satisfactory in classrooms if the proper type of fixture is selected.

The child spends many hours in his school life seated at a desk or table. Desk or table tops and seats properly adjusted to the height of the pupils using them contribute to his health. Poorly adjusted seating can cause postural maladjustments, loss of circulation in the legs, poor digestion, and cramping of the organs of respiration. The desk should be at the proper height for the child to write with ease. The seat should allow the child to sit comfortably with right angles at hips, knees, and ankles. The thighs should extend a few inches beyond the seat when the hips are firmly pressed against the back of the seat. Both

seat and desk height should be adjusted for the child no less than twice during the school year. To avoid sharp contrasts between the white paper used in classwork, natural wood or blonde finish should be used for desks or table tops.

The arrangement of the furniture in the room is of great importance in the promotion of health. Children should never face a high light source. Turning the desks so that the forward line of the pupil's vision will be at an angle of 50 degrees with respect to the windows will help prevent visual problems. Where tables and chairs are used, every effort should be made to prevent any children from facing the windows. This may involve rearranging the placement at tables or seating the children on one side of the table.

The School Schedule

Careful attention should be given to the school schedule. Factors such as a child's age and emotional adjustment and the excitement caused by the activity determine how long he can be expected to be interested in a given task and be successful in doing the work. If held to a task too long, children get restless and irritable. Too much excitement, too much concentration, too much of anything causes fatigue. And fatigue causes children to be inefficient in doing their work. Frequently class schedules are arranged so the periods assigned for given subjects are too long and the assignments are not sufficiently diversified for the pupils to work at peak efficiency. Art, music, and physical education should be interspersed with other subjects. A well-planned program offers opportunity for pupils to have a "change-of-pace" that protects them from becoming disinterested and fatigued.

Every child has a need to "belong." He must be accepted by his peer group and by the adults that count most with him. And each child must enjoy success in some endeavor. Fatigue, ill-health, poor motivation, emotional disturbances, and mental retardation are blocks that make it difficult for certain children to have this pleasure. Success can be given certain children affected by such blocks through a co-curricular program of

sports, clubs, music, dramatics, and rhythms. This program should be sufficiently varied to provide opportunity for every child to participate in some phase of it. In its operation, however, care should be taken to make certain that no child participates in the program to the extent that he overdoes as a result of being overstimulated.

A balance between the curricular and co-curricular programs should be maintained. Children can become fatigued while working on projects, preparing programs, and doing other work connected with playdays, Hallowe'en, Thanksgiving, Christmas, Washington's and Lincoln's birthdays, Public Schools Week, Easter, Armistice Day, and parent-teacher association meetings. Teachers should encourage different children to take part in the various programs rather than allow the same children to take part in all programs. The pressures of athletic contests as well as of special poster, spelling, and essay contests should be considered in balancing the school schedule and protecting the children from overstimulation and fatigue.

The School Lunch Program. An important part of the school program is the provision for an adequate lunch. Children use a great deal of energy daily. Many children come to school without having had breakfast. Other children have to ride busses for many miles to reach school. This means they must eat breakfast at a very early hour. A real need is thus created for the school to serve an adequate lunch. The "Type A" lunch recommended in the National School Lunch Program provides one-third to one-half of the daily food requirements of a child. Information concerning this lunch may be secured by writing the School Lunch Program, California State Department of Education.

The school lunch should be part of the total educational experience of each child. In the school lunch program pupils can be given a share in helping plan menus, decorating the lunchroom, making place mats, and maintaining order during the time they are eating. The lunch program also offers opportunity for pupils to share duties, practice good manners, engage in conversation, and to serve as hosts and hostesses.

The lunchroom should be adequate in size and well lighted. Hand-washing facilities that are readily available and used regularly are important. Many schools have hand-washing facilities near the entrance to the lunchroom. The lunch should be prepared and served in a sanitary manner. Lunchroom personnel should be trained in techniques of safe food handling and should understand reasons for various sanitary regulations. Pupils assisting with food preparation and serving should also understand the basic principles of safe food handling and should work under the supervision of responsible adults.

The Social Environment of the School

Human relations in the school environment are of equal if not of greater importance than are the physical features of the school plant. The relations between faculty, administrators, custodians, pupils, and the community can help offset certain of the inadequacies in the plant; or these relations may create additional problems as far as the health of pupils and teachers are concerned.

The key person in establishing the pattern of the human relations within the school is the administrator. Within the course of the school year he deals with teachers, pupils, parents, nurses, community groups, and others. Some administrators provide good leadership for their teachers. Where such leadership exists, school policies are established in a democratic manner. The administrator encourages the faculty to work on projects in which they are interested. When necessary he protects faculty members from community pressures. His efforts are bent toward making the working conditions favorable. He endeavors to give each faculty member assignments in which he has had opportunity to display his strong points.

Another important part of the healthful school environment is the intrafaculty relationships. Some faculties work well together. They realize that all have common problems and work co-operatively to solve the problems. In this way they share in making life for their colleagues as easy as possible. Proper facil-

ities for eating, relaxing, working, and participating in meetings do much to obviate unsatisfactory faculty relationships.

Each teacher should realize that he has an obligation to himself. The healthy teacher has abundant energy, buoyancy, and ability to think clearly and to plan carefully. To be able to do an adequate job, the teacher must protect his health. Every teacher should have a thorough medical examination annually to be sure he can stand the stresses and strains of the classroom. He also needs to have interests other than his job so as to maintain his mental health. He needs to meet with other professional people. His out-of-school contacts should be with congenial friends from various professions, businesses, and vocations. He should have hobbies or an avocation to help relieve tension.

Faculty-staff relations are important too. Secretaries, clerks, custodians, cafeteria personnel, and other staff members have their jobs to do. The faculty should realize that these busy people cannot drop everything to help them. On the other hand, the staff needs to keep in mind they are to help teachers accomplish the main job of the school, which is educating the child.

Teacher-pupil relations are very important. In every classroom there are from 30 to 35 different personalities that must adjust to each other. A few of the children are in conflict with all adults. Certain of them are noisy, some are aggressive, some shy, some well-adjusted. Certain children, because of parental attitudes, approach school with fear. Teachers must remember that each child is a unique person. Each has his strong points and weaknesses.

There are certain things every teacher can do to insure good relations between himself and the children under his guidance. He can make the classroom a place where friends meet to work. He can avoid glaring at the children, using sarcasm, being dictatorial, and using words beyond the children's understanding. He should give the children a share in the procedures followed in various activities and should work as a partner of the children. Since all children need to be accepted by their peers, the alert teacher will make certain that no child is kept from being an active member of the group.

All children need to enjoy a measure of success. This success does not need to be a great triumph. It may be as simple as spelling a word correctly or doing a good job in a school play or program. The lack of success may cause children emotional maladjustment.

Class discipline should be friendly but firm. The keynote of discipline is consistency. When children know the limits to which they may carry their activities they gain a sense of security by living within the limits. As the child lives within the regulations, he gives adults many opportunities for praise. This helps the child to continue his acceptable behavior.

Community attitudes toward the school have much to do with the establishment of a healthful school environment. In most communities the schools are well accepted. Parents are interested in the education of their children. They are eager to co-operate with the school; they accept members of the faculty as adult individuals who have the same rights and privileges as other adults in the community. However, in certain communities, conflict exists between certain groups and the school. These may be caused by a variety of different conditions. The teacher's socioeconomic status may be so different from that of the community that a conflict develops. One young teacher in a wealthy community found herself in conflict with her pupils when teaching a geography lesson about South America. Her only contact with the area had been through the pages of the textbook. One student, who challenged her statements, had spent his summer vacation touring the area with his family. This conflict could have been avoided by capitalizing upon the pupil's experience.

The importance of the healthful school environment in the success of the school is great. A good environment helps to conserve human resources. It provides children opportunity for happiness and success and keeps the educational system strong. As school achievement accelerates, under the influence of healthful school environment, everyone benefits—administrators, supervisors, teachers, pupils, parents, and communities.

FINDING CHILDREN'S HEALTH NEEDS

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Certain children's health needs are caused by psychological and physiological conditions; other needs come about because of social conditions. The results of research studies reveal certain needs of children that merit particular attention in the program of health. For example, five- and six-year-olds have a decided need for activity that helps them to develop the large muscles. They also need rest to compensate for heart lag. This combination of activity and rest releases tensions that if permitted to persist might prove harmful to their health. Eleven- and twelve-year-olds have a pliability of bone structure that may cause them to develop poor posture unless they are given opportunity to participate in activities planned to help them develop good posture.

Psychologically, individuals need to belong, to be secure, to receive affection, and to be loved. They need contact with reality, opportunity for self-direction, and adequate successful experience to make them capable of meeting or accepting failure. Socially, children need to achieve a measure of independence and freedom and an awareness of the values of social groups. They need to develop a conscience and to learn how they can adjust to changes in their own bodies.

Although all children have the needs mentioned, the needs of each child differ in degree from those of any other child, and the combination of needs of each child causes him to have problems that differ from those of any other child. These differences make it necessary for the teacher to determine the needs of each child and to provide for him the educational opportunity necessary for him to meet his needs.

Children's behavior indicates the adjustment they have made to their environment. A maladjusted child may be overaggres-

sive, oversensitive, or doing a quality of work below his level of ability. In certain instances the maladjustment may cause the child to have an excessive number of accidents. These behaviors have underlying causes. In each instance certain of the child's needs have not been met.

Teachers can identify children's health needs in numerous ways. For example, a teacher can observe a child's behavior in various types of situations, note ways in which it deviates from the behavior of other children in the same situations, and study the reason for the deviations. Other procedures the teacher may employ to determine the child's health needs include holding conferences with the child's parents regarding his problems, habits, interests, and out-of-school activities; talking with the child about his problems and activities; analyzing the child's school attendance, scholastic, and health records; making and maintaining growth and development charts showing the child's weight, health, skills, attitudes; analyzing the results of vision screening and hearing tests; using tests and check lists to find the child's interest and attitudes; analyzing the child's work in school—assigned and creative; and using projective techniques.

Observation may be employed to identify the health needs of each pupil. In such observation the teacher notes any behavior or appearance that deviates from the normal. To make certain that the deviations are significant, systematic and repeated observations are made, and if possible the reasons for the deviations are determined. In certain instances these reasons are sought by referring the child to the school nurse and asking the nurse's help.

Many schools provide observation record forms on which a teacher can note a child's study habits, general appearance, condition of skin and scalp, difficulties in seeing and hearing, such conditions as congestion of the nose, or sore throat. These records may be analyzed to determine the types of activities that should be provided in the program of health instruction. In certain instances information in the records should be discussed with the child, his parents, or health service personnel to trace the source of the child's problems.

In conferences with parents the teacher should encourage them to discuss qualities and strengths of their child first and then the weaknesses in the child's health attitudes and habits. During the conferences valuable information concerning the social structure, the emotional climate, and the health attitudes and habits of the family can be secured. Also information may be obtained regarding the health problems that exist in the neighborhood and the community.

Talking with a child is an especially fruitful way of finding how the child lives at home, his eating and sleeping habits, the extent to which he is disturbed by sibling rivalry, and the degree of love and affection he enjoys.

In talking with a child it is most important that the teacher begin by encouraging him to discuss his interests, hobbies, and difficulties. Throughout the talk the teacher should be sensitive to the child's way of thinking. Following the talks the teacher should help the child to interpret his problems and to plan ways of solving them.

Check Sheet of Opportunities in Human Relations, developed at Horace Mann-Lincoln Institute of School Experimentation, Teachers College, Columbia University, contains a series of 25 questions which were used in the development of a study of how young people get to know each other and people in the community. Use of this check list will help the teacher to discover the range of activities in which a child is interested and the values he places on them. For instance, a boy may indicate a desire to be an athlete. This is a clue for reaching him in terms of his health attitudes and habits. Other instruments that can be used to advantage for similar purposes include *Behavior Preference Record*,[1] devised by Hugh B. Wood, the *California Test of Personality*,[2] devised by Louis P. Thorpe, Willis W. Clark and Ernest W. Tiegs, and *The Wishing Well*, a test for grades four to seven, developed by the Evaluation Division, Bureau of Research, Ohio State University.

[1] May be obtained from the California Test Bureau, 5916 Hollywood Boulevard, Los Angeles, 28.
[2] *Ibid.*

A practice inventory can be used advantageously to find out about children's health practices and habits. An inventory of this type for lower grades may comprise a few simple and specific questions pertaining to health. For instance, the following questions may be asked regarding a child's care of his teeth. Do you go to the dentist? Do you have a toothbrush? How many times a day do you brush your teeth? To make a more comprehensive inventory, each child may be asked to collect and display pictures of activities that are indicative of his health practices.

Sociometric techniques may be employed to find the reasons for a child's behavior in various classroom activities. In many instances his undesirable behavior may be caused by health needs.

A hearing test should be given to every child at the time he enters school and the test should be repeated at regular intervals during the years he is in the elementary school. These tests must be administered by qualified persons. The results of hearing tests should be used as a basis for reporting to the parents of the child his need for examination and treatment. Test results should also be used in planning ways in which the child can be given greatest opportunity in the educational program. For example, the child who has difficulty in hearing should be seated in the classroom where he will have the greatest opportunity to hear and where he will be in position to see the faces of those who are speaking.

In addition to making use of the results of hearing tests, teachers should constantly be on the alert for signs of children's inability to hear. These signs may be in the form of running ears, frequent headaches, mouth breathing, continued respiratory infections, or extreme fatigue. The signs may be evidenced in the child's behavior. For example, a child may fail to hear questions, be inattentive, lack confidence, mispronounce words, or turn one ear toward a speaker. When teachers observe such signs they should have the child retested at the earliest date possible. In the interval between the time the signs are observed and the test is administered, such adjustments as can be made

in the classroom to help the child overcome his difficulty should be put into effect. After the child has been tested, other adjustments may be found to be necessary before the child will be able to learn at a rate and to a point commensurate with his ability.

Vision screening tests may be given to elementary school children by qualified supervisors of health and by classroom teachers who are trained to use techniques and follow the procedures prescribed for administering the tests. The results of the tests can be used to advantage in determining what adjustment should be made in the educational program to help children with visual difficulty progress as nearly at a normal rate as their handicaps permit.

Using the results of vision screening tests to make the necessary adjustments in the program is but one phase of the teacher's responsibility for children's vision. Teachers must also observe children's appearance and behavior to discover signs of visual difficulty. Red rimmed, encrusted or swollen eyelids, dizziness, headaches and nausea following close eye work, or complaint of blurred vision are frequently indicative of visual difficulties. Rubbing the eyes frequently, excessive blinking, reading with the book held exceedingly close to the eyes, and shading the eyes to avoid light are other signs. When such signs are noted the teacher should refer the child to the school nurse for attention. If correction of the condition is not secured the teacher should then do all within his power to provide the child with work and working conditions that will cause him a minimum of visual strain.

Cumulative records of children's school progress provide a logical place to start making a study of a child's needs. In many instances such a study will reveal that a child who is having difficulty in doing his school work or getting along with other children has certain health needs.

The child's health record is also an important source for determining children's health needs. Anecdotal records also frequently provide a number of clues regarding a child's health needs. Also the attendance record for each child in a class may

reveal that certain of the children have health problems that are keeping them from attending school regularly.

Height and weight records provide valuable information regarding children's growth provided they are kept up to date. To keep the records up to date the children's heights and weights should be taken at intervals of one, two, or three months. The records should be analyzed at the time they are brought up to date to determine whether there have been unusual changes in any child's growth. Children who are found to be well underweight should be referred to the school nurse for attention unless the reasons for the condition are known and appropriate steps are already being taken to correct the condition.

Stuttering, stammering, and lisping should be noted early in the school life of a child and plans made for speech correction, for when these conditions persist they often cause the child's health needs to become increasingly great.

Children's reactions to pictures may be used to find how children feel about certain health practices. Pictures of health activities may be presented for the child to talk about. While he is talking, the child may name the kinds of foods he likes or dislikes, tell the amount of sleep he thinks he needs, reveal his attitude toward the doctor and dentist.

Role playing and dramatic play in primary grades are often used as therapy but they are also helpful ways of finding children's needs. The teacher who needs information regarding family living in the community can secure the information by observing role playing of a family group. The health habits and attitudes of various members of children's families are displayed by the children in this type of activity.

When the health needs of children have been identified, the steps necessary to meet them should be taken. Individual guidance, specific activities, or a change of environment may be needed to help certain children solve their health problems. Other needs of the children may be met through group activities. In most instances children can be guided so that they will acquire attitudes that will cause them to develop sound, wholesome, healthy personalities.

THE VALUE OF HEALTH INVENTORIES FILLED OUT BY PARENTS

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For many years it has been recognized that principals, teachers, and health service personnel need certain information regarding school children's health that can be obtained only from the children's parents. At many schools this information is gathered by holding conferences with the children's parents; in others, parents are invited to be present while their child is given a medical examination and are asked at that time to provide the information; and in other schools parents are requested to provide bits of specific information on special forms rather than given opportunity to provide a complete record at one time.

To secure from parents the information needed regarding their children's health, the San Francisco Unified School District has developed and uses a form called the Health Inventory. This inventory was an outgrowth of the three-year (1947-50) San Francisco Community-School Health Education project sponsored jointly by the California State Department of Education and the California State Department of Public Health and financed by a grant from the W. K. Kellogg Foundation. Responsibility for carrying out the project was shared by the San Francisco Unified School District, the San Francisco Department of Public Health, and San Francisco State College. A medical health officer and a public health nurse were assigned by the State Department of Public Health to work on the project as consultants.

The over-all purpose of the Community-School Health Education Project was to study ways and means by which an effective health education program could be developed with the available personnel, time, and money, and to explore ways by

which all persons in and out of school who are interested in and have responsibility for children's health can work together for the improvement of the health of school-age children.

While the project was in operation it was found that more than the available information about school children's health was needed by persons working in the various phases of the instructional program. A subcommittee comprised of physicians, nurses, principals, and teachers was therefore appointed to consider the kinds of information needed and to devise a form that could be used to collect the information. After considerable deliberation the Health Inventory was completed. In addition to items frequently found in school health history forms, the Health Inventory was designed to secure from parents valuable data on family background, the child's health practices at home, parents' opinions of the child's physical and emotional health status, protective immunizations he had received, source and amount of medical and dental supervision he had been given, and the child's interests and activities outside of school. A space on the inventory was also provided for parents to request consultation regarding their child's health problems.

The completed draft of the Health Inventory was approved by the central co-ordinating committee of the project. Although members of the Committee were skeptical regarding the willingness of parents to supply the information requested, it was decided to use the Health Inventory on a trial basis in an elementary school and to evaluate the results. A sampling was made from the kindergarten, first, third, and sixth grades of the school selected for this purpose. This represented about 60 per cent of the 600 children and the teachers in the school.

A carefully worded letter interpreting the Health Inventory, addressed to parents and signed by the health officer, the superintendent of schools, and the school principal, accompanied each Health Inventory given to the pupils to take to their parents. After the parents had completed the forms and returned them to the school, data were tabulated and evaluated.

The information sought in evaluating the Health Inventory is set forth in the questions in the left hand column; answers to

the questions are set forth under the heading "Findings" in the right hand column:

Information Sought	*Findings*
1. To what extent will parents co-operate in supplying the data to the school?	89 per cent of the forms were returned completely filled out by parents within 10 days; 93 per cent were returned by the end of three weeks.
2. Is information secured from parents reliable?	Immunization data were used as a criterion of reliability. Immunization data secured by other means checked practically 100 per cent with the immunization data recorded by parents.
3. Are data obtained by use of the Health Inventory duplicated by data already available on other records in the school?	Only scanty data were available on other records in the school. The cumulative record for individual pupils duplicated some of the identifying data requested. The medical and nursing records had certain data on some of the children, but not as complete data on any child as the Health Inventory gave.
4. Is the Health Inventory useful as a tool for identifying children with health problems?	From the data recorded by parents, 36 per cent of the children were identified as having physical and emotional problems or both thought by the school health service staff to require follow-up.
5. Does the Health Inventory stimulate parents to request consultation with school personnel regarding physical and emotional health problems of their children?	27 per cent of the parents whose children revealed health problems requested an opportunity to discuss these health problems with professional personnel of the school.

6. Is the Health Inventory useful as a tool for pointing out unmet needs in health education of individual children and classroom groups?	Health habits and health practices of individual children and classroom groups were clearly portrayed, which brought into focus the area of health instruction that needed strengthening.
7. Is the Health Inventory useful in stimulating the school team (administrator, teacher, physician, and nurse) to plan together for immediate and long-range programs of health services?	Better integration of health instruction with health services was inaugurated in the project school as a result of the stimulus given by the data from the Health Inventory.
8. Is the Health Inventory useful to physicians at the medical examination?	Data on the Health Inventory provided a good history—family background, insight into economic status, past and present health problems, protective immunization, current health habits and practices, and valuable clues to the physician for finding unsuspected health difficulties. This enabled physicians to direct their efforts to pertinent problems and conserved time for medical examination and interpretation to parents.
9. Is the Health Inventory useful to the physician in guiding the nurse and teacher in follow-up?	It provided the physician with a broader base upon which to make recommendations for follow-up.
10. Is the Health Inventory useful to the physician in determining the level of protective immunization among school children?	Recorded data revealed that 78 per cent were protected against smallpox, 75 per cent against diphtheria, 61 per cent against pertussis, and 43 per cent against tetanus.

11. Is the Health Inventory useful in integrating the services of private physicians in the school health program?	Data on the Health Inventory revealed that 77 per cent of the children received medical care from private physicians. This focused attention on the need for more active participation of private physicians in the school program and stimulated the organization of a Medical Advisory Committee of private physicians.

The Health Inventory provides a rich source of information about each pupil's health which can readily be made accessible to all professional personnel of the school. It utilizes a too often neglected source (parents) for securing information about pupils' health. It encourages parent-school co-operation and strengthens this relationship. In giving parents an opportunity to review and evaluate at one time a broad scope of the health status of their child, the Health Inventory has educational value for the parents themselves. This was particularly noted in the area covering the child's emotional health. As a method of health appraisal, the Health Inventory, together with observation by the teacher, the teacher-nurse conference, and the medical examination, provides a broader base on which recommendations for individual children can be made and on which programs can be planned to meet the needs of children. It provides an effective means for identifying children with health problems and brings to light the unmet needs in health instruction. It stimulates participation by the private physician and dentist because it portrays the kind of resources, private or community, used for medical and dental care and the extent to which these resources are used.

After the close of the demonstration project, the methods and procedures developed during the study, including the Health Inventory form, were used in additional schools. To determine the usefulness of the Health Inventory for teachers, an evaluation questionnaire was sent to teachers who had approximately 18 months of experience in the use of the form. The following are the results of the evaluation by 117 teachers.

Information Sought	*Response*
1. What per cent of teachers indicated that the information provided by parents on the Health Inventory was helpful?	99 per cent of the teachers found it helpful.

2. What sections of the Health Inventory were indicated as helpful and by what per cent of teachers?	*Section*	*Per cent of Teachers*
	VI—Emotional Health	76
	V—Symptoms recently noted by parents	66
	II—History of past illness	58
	VII—Health Practices	56
	All Sections helpful	8
	Teachers failing to indicate helpful sections	8
3. What sections of the Health Inventory were not helpful?	VI—Emotional health	11
	III—Immunization	9
	VIII—Health Practices	8
	IV—Tuberculosis: exposure, skin test, X ray	7
4. In what ways did teachers indicate that they used the information on the Health Inventory?	Referral of children for health services	74
	Teaching	74
	Teacher-parent conference	50
	Teacher-nurse conference	79
	Counseling	24

5. Additional comments on the Health Inventory made by one-third of the teachers can be summarized as follows:
   a. The data give the teachers a better understanding of the child's health status, his needs and capabilities, and help the teacher to adjust the work assignment, seating, and physical activities.
   b. The information gives the teacher a better understanding of the home and home influences on the child and thus helps to improve the teacher-child and teacher-parent relationships.

c. It is helpful in curriculum planning for class discussion on health subjects such as rest, nutrition, health practices and habits, and dental health.

Nine teachers commented that the section on emotional health was not helpful because the parents evaluated the child's behavior in a different light from that of the teacher and either overrated or underrated the emotional adjustment of the child.

Values of the Health Inventory

The values of the Health Inventory are summarized in the statements that follow:

1. The Health Inventory provides a rich source of information about each pupil's health which can be made available to all professional school personnel.
2. The Health Inventory utilizes an often neglected source (parents) for securing information about pupils' health.
3. As a method of health appraisal, the Health Inventory, together with other methods, such as teacher observation, the teacher-nurse conference, and the medical examination, provides a broader base on which recommendations for individual children can be made and on which programs can be planned to meet the needs of children.
4. The Health Inventory provides a method for parent participation which is often overlooked or neglected. It encourages parent-school co-operation and strengthens this relationship. In giving parents an opportunity to review and evaluate at one time a broad scope of the health status of their child, the Health Inventory has educational value for the parents themselves. This was particularly noted in the area covering the child's emotional health.
5. The Health Inventory provides a means for identifying children with health problems.
6. The Health Inventory is of value in bringing into focus for the classroom teacher the unmet needs in health instruction.

7. Because the Health Inventory portrays the kind of resources (private or community) for medical and dental care and the extent to which these are utilized for children, participation by private physicians and dentists in the program is stimulated.

8. In a recent teacher evaluation of the Health Inventory, 99 per cent of the teachers indicated that the information provided by parents was helpful.

The areas of the Health Inventory which were helpful to over 50 per cent of the teachers were the sections relating to the following:

a. Emotional health
b. Signs and symptoms recently noted by parents
c. History of past illness
d. Health practices

Approximately 75 per cent of the teachers surveyed indicated that they used the information for the following:

1. Referral of children to health services
2. For teaching purposes
3. For teacher-nurse conferences

Fifty per cent also utilized the information for teacher-parent conferences and 24 per cent used it for counseling.

The Health Inventory form used by the San Francisco Unified School District follows.

HEALTH INVENTORY

For Elementary School

San Francisco Department of Public Health

San Francisco Unified School District

I. Pupil's name_____ Sex____ Birth date_____
Address _____ Phone no._____
Father's name_____ Mother's name_____
Employer's address _____
Employer's telephone no._____

In case of accident, this information will assist the school principal in notifying parents.

How many members in immediate family.....Mother.....
Father.....Brothers.....Sisters.....Others.
Does this child live at home with.....Mother, ...Father, if not, with whom is child living?....., give relationship.....

II. Past illness (please check those which your child has had)

....measles	....scarlet fever	....heart disease
....whooping cough	....diphtheria	....chorea (St. Vitus Dance)
....infantile paralysis	....smallpox	....epilepsy (convulsions)
....rheumatic fever	....diabetes	

Please tell any other serious illness, operation or injury, and age when incurred: .....

.....

III. Has your child been vaccinated against smallpox? No..... Yes.....
Does he/she have a scar? Yes....No.... What was the date when he/she was last vaccinated?.....
Has your child been immunized against diphtheria? No....Yes.....
Year.....
Has he/she been reimmunized (booster protection)? No....Yes.....
Year.....

IV. Has your child ever been around anyone known to have tuberculosis? No.....Yes.....Year.....
Has he/she ever had a skin test for tuberculosis? No.....Yes.....
Year.....
Do you know if the test was: Positive....Negative.... Has he/she had an X-ray of the chest? No....Yes.... Year..... Where was the X-ray taken?.....

V. Please check any of the following symptoms which have been noted recently:

....4 or more colds each year	....allergy
....frequent sore throat	....persistent cough
....frequent headaches	....speech difficulty
....blurred vision	....running ears
....frequent styes	....hard of hearing
....frequent pains in legs or joints	....frequent nose bleeds
....dizziness	....night sweats
....fainting spells	....tires easily
....abdominal pain	....shortness of breath
....frequent urination	....hernia (rupture)

VI. Information which will help you, the school staff and physician understand your child better. Please check which of the following you observe in your child:

____nail biting	____becomes discouraged easily	____selfish
____thumb sucking	____worries a great deal	____excitable
____bed wetting	____has many fears	____angers easily
____shy	____is self reliant	____suspicious
____happy disposition	____dependable	____very easy to manage
____orderly	____jealous	____thoughtful of family members
____helpful around home	____likes to play with others	____would rather read or study than play with other children
____has many friends	____resentful	
____is a leader	____is generous with playmates	____likes to go to school
____has few friends		Other_____
____prefers to be alone		

VII. What time does your child usually go to bed_____, get up_____. Does he/she eat breakfast_____, lunch_____, dinner_____ every day? Does your child eat lunch at home? Yes_____ No_____; carry a packed lunch to school? Yes_____ No_____; buy his lunch at the school cafeteria?_____, store_____, elsewhere_____.
What is the average amount of milk he/she drinks each day_____.
Check any other beverage which he/she usually drinks daily:

_____ _____ _____ _____ _____

tea coffee fruit juices, cola or other soft drinks, other

VIII. What does your child like to do when he is not in school, such as (circle): hiking, outdoor games, paper route, reading, movies, music, other_____.
Does he/she belong to a boys' or girls' club? Yes____ No____. Give name of club_____. How often does he/she go to club meetings?_____.

IX. Do you take your child to a private physician? No_____ Yes_____.
What is his/her name?_____. How often do you take your child to him/her?_____.
Do you take your child to a clinic? No_____ Yes_____.
Which clinic?_____. How often?_____.
For what reason and when did you last take your child to a private physician or clinic?_____.
_____ Date_____
Do you take your child to a private dentist? No_____ Yes_____. What is his name?_____. How often does your child visit him?_____
Do you take your child to a dental clinic? No_____ Yes_____. Which clinic?_____. How often?_____.
Are there any problems or other matters which you would like to discuss with the school staff (physician, teacher, nurse, other)?
_____

Date_____ Parent's signature_____
San Francisco, California Revised April 11, 1950

HEALTH WITHOUT FEAR

ARTHUR H. PARMELEE, JR., M.D., *Instructor, Department of Pediatrics School of Medicine, University of California Medical Center, Los Angeles,* and *School Physician, University Elementary School, University of California, Los Angeles*

"Health" that is accompanied by fear of disease, injury, or deformity is not truly health in the complete sense of the word. It is distressing for me as a physician to see so much of this fear among children, parents, and even teachers. In fact, sometimes I find that the fear of a disease or injury is more incapacitating to the patient I am treating than the disease or injury could ever be.

My reaction to this is to wonder about what course we should take in our health education. Certainly, if there are many cases such as I have mentioned it would seem advisable to forget about the illnesses and their prevention and work toward eliminating the fear reactions. It would even be more sensible to deal with both aspects of the problem, but keep the measures directed at the prevention of the illness in proper proportion to the nature of the illness and the public fears that might be created. To accomplish this I think we should re-evaluate what we are doing and what needs to be done.

In the beginning of modern public health and health education in this country, we were fighting battles against illnesses for our very lives. Diphtheria and small pox could destroy large portions of a city's population in one epidemic. Diarrhea during infancy killed babies by the thousands. These were real dangers we could see and of which we could honestly be afraid. By conducting diligent, forceful, head-on campaigns in public health and health education to get the public to apply sanitary principles and make use of immunization and the newer drugs, we have won great victories. These victories are reflected in our mortality statistics which now put accidents, heart disease, and

cancer ahead of the previous common killers. This is not because the death rate due to accidents, heart disease, and cancer is increasing but because the other diseases are coming more and more under control. Actually our over-all mortality rates are steadily declining and people nation-wide are living healthier and longer lives.

This does not deny the fact that in some areas health problems exist that are appalling and reminiscent of past decades. Certainly in some other countries diseases are still rampant that have nearly vanished for us. Organizations exist and are being established to help these areas and these countries.

The very nature of progressive achievement, however, is such that we must always shift our focus to new frontiers as we maintain our foothold on the ground gained. In public health and health education we are now talking about and striving toward ideals of health, not mere survival. We want mental health and physical fitness for everyone. It would seem that if such goals could be simply stated and a path toward them charted we would be on our way. I think that we have been fooled by what has seemed to be obvious and almost simple. We have been like the adolescent boy who feels a wealth of energy in him and an urge to do great things. He immediately sets out for the highest goal possible without reflection on the realities of his situation. If the realities are such that he may never reach this goal or not for a long, long time, he will be subject to frustrations, defeats, and the fears of hopeless inadequacy.

On the other hand, we think of the mature person as one who judges his potentials and his situation realistically, neither underestimating nor overestimating them, and sets his goals accordingly. With each goal achieved there is a new appraisal with possible promise of greater achievement.

We, for a while, have acted like the immature adolescent. In many ways we have created in the public minds perfectionistic goals that are certainly admirable but hardly realistic. I have talked with parents who were utterly confounded because their children were having a series of colds. "But Doctor, I give the children vitamins, make them drink milk and eat meat and

vegetables, and they always take a nap and go to bed early. Why are they sick?" Such a mother is honestly frightened by feelings of inadequacy. Whether we intended it or not, we find ourselves and those around us thinking in terms of complete freedom from all illness, injury, and crippling. We think we should always have abundant energy and strength and always wake up in the morning cheerful and refreshed.

The facts are that as yet we cannot completely prevent or cure the common cold, although we may decrease the incidence somewhat by stringent measures. There are some hereditary and congenital deformities we cannot control. Catastrophies of nature, such as earthquakes, floods, and typhoons, will continue to cripple and injure us. Wars with their endless stream of crippled and wounded seem to be continuing. In addition to this the natural consequences of aging have not been solved by medical science.

By our public health programs and education we do in a sense create a cultural body image as a standard by which all members of society measure themselves. The more one deviates from this standard, the more fearful and inadequate one feels. A perfectionistic cultural body image that is never sick, always strong and energetic, and never injured or deformed, certainly would seem to be unrealistic and fear-provoking at this time.

We can't even define what we mean by physical fitness. Fitness for what? We were stunned by the number of men found unfit for the military service. Yet these men and the housewives of the nation brought our home-front production up to staggering proportions. As we work more and more in the field of rehabilitation of the physically handicapped, we wonder what we mean by the word handicapped.

Kessler quotes a study of 6,565 male and female workers in whom only 7 per cent were found to be free of gross physical defects detectable by physical examination without the use of X ray or laboratory facilities.[1] Only a small part of these were "major" defects but they were detectable defects just the same.

[1] Henry H. Kessler. *Rehabilitation of the Physically Handicapped.* New York: Columbia University Press, 1953.

He further points out that the absence of symptoms or physical signs of disease does not constitute a proper basis for defining "normal" persons. For at autopsy advanced disease is sometimes found that had not manifested itself in physical signs or symptoms.

It would seem then that we should be more mature in our thinking and face up to the facts and the limitations of our abilities to change them. When we do this we will be less afraid. Without this fear I think we will make more progress. With each bit of progress we can reassess ourselves and perhaps put our goal a little higher.

Perhaps a definition of health for the present time might be that health is the ability to live with the optimum amount of independence, creativeness, and satisfaction with or without disease, injury, or deformity.

GROWING PAINS NEED ATTENTION

INGA C. MCDANIEL, *Consultant in Guidance*

Inherent in every human being is the ability to grow. The tiny baby lying on his back moves from side to side and finally is able to turn completely over. As the months go by the child grows in a patterned sequence of abilities. He successively becomes able to sit, to crawl, to walk, and finally to run. Growth is sequential, orderly, and inevitable for every child.

So happy and so natural are the responses of children when the surrounding environment has been favorable that the eager response of little Davy, a kindergarten boy, can be readily appreciated. He was asked by a friendly adult, "Where did you come from, anyway?" Quickly Davy answered, "Oh, God made me just this big (gesturing with his hands apart) but I growed all the rest of the way by myself!" Happy and fortunate had been Davy's growth and development thus far in his life.

The process of growth can continue to be completely normal and untroubled if the child has good inheritance and has the ability to meet the demands placed upon him, if he is given adequate care, is supported by love, acceptance, and understanding, and remains free from crippling injury or emotional tragedy. Each person must grow according to his own rate and in his unique way. Year after year he must seek to overcome the pressures and meet the needs that emerge within himself as well as those that arise in his environment. He must continuously strive to maintain his equilibrium in an ever-changing environment.

The poet Wordsworth succinctly sums up these innate abilities for continued growth and development when he observes, "So build we up the person we are." The process of "building" a mature personality must be well understood by those who work with children and youth. How teachers, nurses, doctors,

and parents visualize human nature and their insights regarding it determine what will be expected of the individual and how he will be educated. What the individual becomes depends upon factors within himself and his continuous interaction with his environment. People are important parts of that environment.

Each child needs sympathetic help as he moves through the uncharted courses of "growing up." In following this course, the child at one time or another has mingled emotions attending physical and social growth changes within himself, and at times he feels anxious, insecure, and inadequate. These are the psychological growing pains that children experience at various times and in different degrees. When they arise, the child needs the guidance of wise and sympathetic adults, parents, teachers, and others. The effects of the guidance he receives are far-reaching.

During the formative years parents and teachers provide a major portion of the guidance children need. Such guidance is fundamentally important, since the effects are reflected generally in all phases of children's personalities and continue to persist in some degree throughout their lives. Nurses, doctors, psychologists, and social workers often meet children during crises or changes in their lives, so that what they do for children has a long-lasting effect. Whatever this effect is, favorable or unfavorable, depends upon the understanding of child growth and development possessed by these professional workers, the skill with which they apply their knowledge, and the situations in which they do their work.

Children's concern with growing up is frequently shown by their expressions of insecurity, of wistful longing, and of puzzling ambivalence in feelings. School psychologists and teachers report that children from the age of seven and on into the age of adolescence have the common desire expressed by the statement, "I wish my parents knew that I was growing up." Many children seem to be extremely desirous of being rid of adult control and restrictions. On the other hand, many children are

seeking protection and parental comfort and express a regressive desire for the continued love and attention that a prolonged infancy period would provide. Often children long to return to the period in their lives when they did not experience pressures and demands that cause them to have feelings of inadequacy.

Growing up is unquestionably children's most difficult job. This is particularly true today. Many children are facing serious and tragic problems in their daily living. Certain of these problems are caused by the fears and neurotic tendencies of adults with whom the children are associated. Other problems are the result of broken family bonds.

Children have an innate feeling of loyalty to both their parents and normally need both a father and mother for full, happy family living. However, in certain cases a single parent can give the love and care that is essential to a child's full development, but the dual role that such a parent must play takes unusual strength of personality and sound emotional maturity.

The mobility of population, characteristic of our national life today, frequently causes the children involved to have adjustment problems that make growing up difficult for them. When their "roots" are pulled up time and time again, children have a very difficult time finding a place for themselves in childhood society. In many cases the children's problems are intensified by parents who feel that as a result of their frequent moves they are being left out of community activities or are not as welcome as they should be in the places where they live. These feelings are projected into their attitudes toward their children and their children's activities.

Parents, in their striving for the material things they want and in seeking economic security, may at the same time be causing their children to be unhappy and to have feelings of insecurity. When children are denied opportunity during their growing up years to own things such as bicycles and play equipment dear to their hearts, in order that their parents can attain their own goals, the children feel resentful and unhappy. When one or both parents work at one or more jobs and have little or

no time for companionship with their children, the children frequently fail to develop the feelings of security and social relatedness that are essential to the development of sturdy personalities.

Equally harmful to children are the sentimental goals that parents sometimes seek to attain. One can sympathize with the unfulfilled needs and yearnings of children in a home in which there are an ever-increasing number of children to be supported—a number too great to be nurtured adequately. A sad little girl, named April, asked to explain her frequent absences, told her teacher that she had to stay home to help her mother with the care of the younger children in the family. She confided to her teacher that her parents wanted twelve children, one named for each month of the year. August was only two months old! April sighed and whispered that it would have been so much easier for all of them, if her parents had wanted only as many children as there are days in the week! Wistfully she had given up her dream of some day being able to take music lessons. She had learned to be grateful for the bare necessities of life and had reluctantly turned her back on her dream.

Adults who are incapable of coping with the rapidly changing social, economic, and familial situations in which they find themselves may cause their children to encounter problems that make growing up a difficult process. Many times such parents impose their anxieties and insecurities on their children and seem unable to give first consideration to their children's problems of growing up. Recently a tired, discouraged doctor, who is the director for a county-wide program in health, listed the underlying reasons for such parental behavior as ignorance, indifference, inadequacy, indigency, inertia, and insecurity. Far-reaching and urgent is the need for helping such parents in every community.

Findings in a number of research studies concerning the most common psychological problems experienced by adults indicate that these problems center around personality disturbances.

Usually such problems involve fear, worry, threats to the ego, frustration, lack of self-confidence, lack of understanding, and consequent lack of adjustment to other people. Parents frequently tend to over-react to the inconvenience and noise made by their children. They tend to blame their children for behavior that is an integral phase of normal growth. As a result parents often bring upon their children pressures and demands that are inappropriate to the age and developmental status of the children.

Another set of problems that make the growth and development of children difficult and hazardous evolves from conditions created by physical facilities that are inadequate for providing necessary educational services. Nationally as well as locally, insufficient money has been allocated to provide adequate programs of education and health services to meet children's needs. Building programs have failed to provide classrooms as rapidly as they have been needed to care for increasing enrollments. Today's children are feeling acutely the need for more time, more individual attention, and more "elbow room" in the process of growing up. Every child needs the opportunities that can be provided in a full school day. Both teachers and children suffer from pressures caused by part-time school sessions and by crowded classrooms.

Many schools have given up hot lunch programs to secure space needed for classrooms. Others have eliminated rest facilities for children. Some schools are so over-crowded that all facilities and equipment must be used according to nonfeasible schedules. Such conditions cause children to have increasing tensions. To overcome these tensions they need desperately to feel that they have adequate time for their school work, sufficient space for carrying on group and individual activities, and opportunity to work where they are free from regimented action.

The pressures that arise in teaching large classes over a period of several years cause certain teachers to become maladjusted to the extent that the children under their direction have difficulty in making normal adjustments. Large classes also make it im-

possible for teachers to give children who are struggling with personal problems and crucial developmental tasks the guidance they need. Overly large classes reduce the opportunities for all the pupils to participate in class activities and limit the educational program offered. The most effective teaching methods cannot be employed with exceedingly large groups of children. Discipline, rather than the child's growth and development, becomes a major concern of the teacher.

The twentieth century has been called "the century of the child" because of the increasing emphasis that has been placed upon the importance of human resources in building a strong society comprised of successful and happy people. Professional persons who work with children and youth in today's schools are dedicated to a thorough-going belief in the value of human resources represented by every boy and girl in the nation. The purpose of education as conceived by members of this group may be stated as that of helping each child to develop to his fullest potentiality so that he may contribute to and help to perpetuate the democratic way of life and develop as an individual whose sturdiness and energy are more than sufficient to meet the demands of life, an individual who lives with zest and courage and vision. Good mental health for any individual involves the ability to live within the limits imposed by bodily equipment, to live with other human beings happily, productively, and without being a nuisance. As teachers guide the total development of a child, they are helping him to acquire the mental, emotional, and physical health essential to productive citizenship and good living.

Child growth is an extremely complicated process. The child, a total organism, is constantly reacting and adjusting to an ever-changing environment. His developing intellect is related to his physical well-being. His emotions strongly affect his physical health. They, in turn, are influenced by his school success or failure, by his physical health, and by his intellectual adequacy. The child's growth pattern is a product of his family history, his personal history, his satisfactions, strains, and frustrations. His accomplishments in school and on the playground

are continuously affected by his health, mental adequacy, interest in work and play, emotional maturity, and the freedom he enjoys.

Growth itself may cause situations to develop that in turn cause certain children to have behavior problems. As a result of exceedingly rapid or slow growth or growth that is irregular, children may find themselves in difficult situations. If the supply of energy is being utilized rapidly and completely for growth, children often become fatigued early and unexpectedly. When growth slows up noticeably, children may develop emotional and social maladjustments.

The personality of an individual emerges as a result of interaction of the individual and his environment. The continuity of his personality development depends upon the sequence and type of conditions that develop in this interaction. Like a river, forever flowing and catapulting along as it seeks the engulfing sea, the human personality is a dynamic, developing system, presenting new aspects at each stage in the individual's life.

In working with a child at any stage of growth, answers should be sought for the questions "What developmental task is the child facing?" and "What adjustment problem is confronting the child?" The answers to these questions will provide information that may be used to determine the child's current needs, his status of growth, and reasons for any tensions or insecurity.

To the current task of growing up, each child brings his past experiences and makes such use of them as appears advisable. In the process he acquires new experiences that prepare him for further growth. The success with which he utilizes his experiences in meeting the various problems he encounters determines the type of personality he develops. There is a tremendous difference in the stability patterns of children's personalities, even in those considered as being representative of normality. In fact, it is often difficult to determine at what point a child's personality pattern differs sufficiently from so-called normal patterns to indicate abnormality. A child can be hypersensitive and

hyperactive or he can be very quiet, even phlegmatic, and still be normal. But in other cases these conditions may exist to a degree sufficiently great to result in the child being considered abnormal.

All children want exceedingly to have the approval and acceptance of the adults with whom they come into contact. All seek to meet their basic personality needs. Among these needs the following are paramount.

1. Every child has the inalienable right to be accepted as a unique individual. He needs to be protected and reinforced against the preconceived life-plans and the destructive biases of parents and teachers.

2. Every child needs to be a "Somebody." He needs to feel wanted, admired, and successful. It is essential to his growth that he experience the satisfaction that results from recognized achievement.

3. Every child needs to face successfully the life tasks that cannot be bypassed. These tasks include the following:

   a) To gradually become independent of parent care
   b) To accept his or her sexual role in life with the necessity to learn the cultural proscriptions and taboos that are inherent within the role
   c) To develop a respect for persons, property, places, and times
   d) To manage his emotional reactions to people and events in his life
   e) To learn to accept authority without resentment
   f) To build a realistic yet worthy concept of self
   g) To develop the ability to establish a good balance between the independence he demands and the cooperation he is asked to give
   h) To establish worthy and appropriate goals for himself within a framework fashioned by an evolving workable philosophy of life

The satisfaction of these needs and the attainment of successive levels of development are not achieved as smoothly and easily by every child as we would hope or desire. Each one needs the help and understanding of adults. In children with slow growth and adjustment patterns and in rejected or insecure children there is a need for care and mothering by a teacher, a nurse, or a counselor over a long period of time. A child cannot be hastened or pressured into growing up faster than his pattern will permit.

Many of the problems of growth and development of children are linked with the adjustments that have to be made at different periods in the child's life as well as with the child's inevitable striving to be himself. Even before the age of entrance to school such problems become evident. Most four- and five-year-olds are extremely active and inquisitive, for they have reached a stage of development in which they can exercise some independence. At this age they are busy establishing themselves as important members of their families. In certain instances this problem is intensified by sibling rivalry. In many instances the overly protective parent extends the child's dependency period into this age when the child is striving for independence and recognition. Conflict is the inevitable result.

When the child starts to kindergarten he must adjust to other children as well as to strange adults. Herein he finds the need for expanding his loyalty to include more than members of his family. He is now a member of a school group. In the primary grades he begins to experience some of the pressures created by planned learning. In these grades he must begin learning to use the tools that are required for successful participation in the modern social structure. Adjustment and learning problems begin to appear. While these problems are emerging, the child is busy adjusting to the school and frequently to new situations arising in his home. Since friendships are beginning to mean a great deal to him he must learn to understand other children, to share with them, and to consider their welfare. He is making adjustments continually.

As the child enters the upper elementary grades, he is entering a period of his life in which he feels more urgently the need for independence, a need that frequently causes him to fight a war with a world established and ruled by adults. A certain amount of rebellion against the demands and customs of adults is necessary if he is to establish himself as an acceptable and admired representative of the "World of Childhood." At the same time the acceptance and approbation of his peer group become imperative.

During these middle childhood years most children become very talkative, noisy, and daring. It is a period in which they flaunt their courage and bravado. Peer leadership establishes a rigid code of behavior and achievement that must be accepted by all. A feeling of adequacy must be attained if the child is to feel secure and happy. A sense of accomplishment, of specific and worthy achievement, is essential to children between the ages of nine and twelve. Many of their heartaches and resultant behavior problems are related to this important need.

The anxiety and frustration felt by the child who is under par physically, and by the child who does not have the necessary motor co-ordination to excel in the rigorous playground games and stunts so important to children in the middle and upper elementary grades, is usually quite apparent. Not only do these children need sympathy and understanding, but they also need guidance and help in developing substitute skills that are acceptable to their peer groups. In certain cases special training in playground skills is even more important than guidance in learning the skills involved in school subjects. Not only must the child in the fifth and sixth grades meet the demands of home and school, but he must learn also to behave correctly in a variety of situations. At the same time he is greatly concerned with proving his prowess and skills on the baseball diamond.

During all periods of growth, most children make good adjustments and have very few serious problems. But the child who reveals serious symptoms of difficulties in adjustment is the

child who finds it difficult to relate himself to other people, the child who cannot step out of self and link his life with the lives of other people, the child who is a failure or who is afraid to try, the child who is excessively withdrawn, too quiet, or over aggressive, the child who is dependent, as well as the child who is hostile, the child who is fearful, and the child who lacks zest and enthusiasm for living. These are the children who need special help in facing the inevitable and difficult problems that growth and development force upon them.

Professional people dedicated to working for the welfare and happiness of children must consider seriously the ways in which they can help children to meet their needs adequately. Each one must endeavor at all times to attain the following goals:

1. To increase his understanding and consequent effectiveness; to employ self-evaluation as a basis for developing clearer perspective of his responsibilities; to be honest and objective rather than defensive and self-protective

2. To include in his planning the results of research findings from the interrelated disciplines, such as medicine, psychiatry, sociology, psychology, and education

3. To help secure for children, youth, parents, and the community the services needed by individuals and by families

4. To be realistic and mature in the co-ordination of his work with personnel of allied agencies, and to co-operate actively with community groups, such as the parent-teacher association, the Crippled Children's Society, the Mental Hygiene Society, and the various service clubs

5. To be as thorough, as understanding, as courteous, and as effective as possible in each contact and each service that he is called upon to render

In helping children to grow to happy and successful adulthood, teachers are helping themselves to attain and to acquire increasing maturity—a maturity that makes each one a person

of complete physical development, controlled emotional reactions, tolerant attitudes; a person who has attained economic independence or is well on the road toward such attainment; a person who has the ability to treat others objectively; a person who is reasonably satisfied with his point of view toward life; a person who is reasonably happy in his job; a person who is usually able to get along without attracting undue attention in the ordinary social life about him; a person who is a co-operating, contributing member of society and who has learned to be unselfish and altruistic. Such are the requirements of maturity and such are the goals toward which children and adults alike are growing.

A SCHOOL-COMMUNITY DENTAL PROGRAM

EDITH LINDLY, *Associate Professor of Health Education, Fresno State College;* and EDWIN C. KRATT, *Superintendent, Fresno City Unified School District*

One thousand dollars and one thousand hours of service! That was the offer of the Service League through the Dental Health Council to the Fresno Public Schools to help solve the problem of dental decay among Fresno school children. Five years have passed since the original offer was made and during this time several thousand dollars and several thousand hours of work have been devoted to the improvement of the dental health of Fresno's children.

DENTAL HEALTH PROGRAM

The total dental health program has many ramifications and aspects among which the following are most significant:

1. To give administrators, parents, nurses, and teachers basic and up-to-date information about dental health
2. To acquaint community and school groups with the scope of the dental health problem
3. To provide health education materials for teachers and pupils
4. To examine the teeth of pupils in the first grade in all schools
5. To inspect the teeth of pupils enrolled in the three pilot schools for a period of six years in order to evaluate the educational aspects of the project
6. To work with parents to strengthen home-school co-operation
7. To develop an adequate teaching guide from kindergarten through sixth grade and to help improve dental health education in high schools

Organization

The original offer of co-operation and support from the Service League was presented to the Fresno City Schools Health Council, whose chairman is the superintendent of schools. The Health Council accepted the proposal to direct work toward the solution of the dental problem. The superintendent appointed a representative group of school personnel to meet with other community groups to work on the problem. From this beginning the Dental Health Council was formed.

Dental Health Council

The Fresno Dental Health Council is a nonprofit organization consisting of representatives of the Fifth District Dental Society (Fresno and Madera counties), the Service League, Fresno Public Schools, Fresno City Council of Parents and Teachers, Dental Society Auxiliary, and dental assistants. Working committees have included representatives of the Fresno County Medical Society and the California Dietetics Association, Central Section.

The purposes of the Fresno Dental Health Council are as follows:

1. To help every school child appreciate the relationship of dental health to general health and happiness
2. To help every school child appreciate the importance of a healthy mouth
3. To encourage the observation of sound dental health practices including personal care, professional care, proper diet, and sound habits of oral hygiene
4. To enlist the aid of all groups and agencies interested in the promotion of health
5. To correlate dental health activities with the general health program
6. To stimulate parents to observe sound dental practices at home by providing adequate diets, by regular dental care and tooth-brushing, and by the restriction of sweets

7. To enlist the aid of the classroom teacher in dental education and in correlating such education with dental practices of school, *e.g.* prevention of accidents to the teeth and restriction of the sale of sweets

The constitution and bylaws of the Council stipulate that the president of the group shall be a member of the Fifth District Dental Society and the vice-president shall be a member of the Service League. The work of the group is carried on by the following committees: public relations, speakers bureau, dental health materials, records and forms, in-service education, examinations, follow-up, child education, and nutrition.

The Council meets the first Wednesday of each month. Any emergency business between meetings is handled by the coordinating committee, which meets on the third Wednesday of each month.

The Dental Society is making the following contributions to the project:

1. Leadership and guidance in accordance with present accepted dental practice
2. Dental inspection of pupils in first grades of all elementary schools
3. Speakers for community meetings and in-service education for the schools

The Service League is making the following contributions to the project:

1. Funds for the Dental Health Council, ranging from approximately two to five thousand dollars annually
2. Service, which includes ordering materials, sorting and counting materials for schools, clerical help, assistance with publicity, handling telephone calls, and writing and producing educational puppet shows
3. Leadership and participation in a broad community health education program

Four Years in the Program

The highlights of the four years during which the project has been in operation are recorded here by years.

1950-51. Three elementary schools, Teilman, Webster, and Morris E. Dailey, were selected by the elementary principals at the annual administrators' conference to serve as pilot schools in the project. Administrators, teachers, parents, nurses, and Dental Health Council members were in attendance at five in-service training meetings during the first year in the program. Teachers emphasized dental health in their classes, evaluated their teaching techniques and methods, and wrote a teaching guide for grade one. All pupils in the three pilot schools were given dental inspections by dentists from the California State Department of Public Health.

1951-52. Eight additional schools, making a total of eleven, were admitted to the program upon the request of the principal of each school. After careful evaluation of 1950-51 results, an improved program was followed in 1951-52, which included the following activities:

1. Three in-service meetings for teachers in the program
2. A care program which included financial aid for needy first grade children
3. Parent education meetings
4. Provision of additional teaching materials for teachers
5. A two-day workshop for the purpose of writing a teaching guide for grade two, attended by 25 administrators, teachers, dentists, and parents

1952-53. All elementary schools, 28 in number, participated in the program in its third year. To create interest in and understanding of the total program, a promotional dinner was held to which were invited all school administrators, PTA presidents, classroom teachers who had been selected to write the next teaching guide, and key community leaders. A complete but brief review of the entire program was given at the promo-

tional dinner and plans were made for the future. The roles of the administrator, parent, nurse, dentist, doctor, and teacher in the project were clarified. The climax of the evening was a demonstration of classroom teaching by an outstanding primary teacher. The effect of the dental health program on a teacher was demonstrated in an interesting manner and the possibilities for better health teaching were re-emphasized in subsequent discussion.

Activities were as follows:

1. In-service training required four sessions. The aims were to give an understanding of the dental health program, to acquaint teachers with up-to-date information, to demonstrate teaching methods and techniques, and to issue materials for teaching. The first two sessions were devoted to discussion of the various phases of the program. At the last two sessions teaching guides developed by teachers were presented. The sessions and their subjects follow:

   Session One

   1. Evaluation of work of first two years
   2. The work of the Dental Health Council
   3. Integration of dental health with the total health program
   4. The status of the dental problem

   Session Two

   1. Nutrition in relation to dental health
   2. Orthodontia
   3. Instructional materials for teachers

   Session Three

   Presentation of teaching guide for grade one by teachers who had used the guide experimentally during the second year of the project

   Session Four

   Presentation of teaching guide for grade two by the teachers who wrote the guide

2. Greater emphasis was placed on meetings of room parents which supplemented the regular parent-teacher association meetings. More parents came to understand the program by this plan than by any method previously used.
3. Qualified personnel of the California State Department of Public Health examined the teeth of pupils in the third grade of the three pilot schools.
4. Local dentists gave dental examinations to the pupils in the first grades of all elementary schools, including the three pilot schools.
5. Financial assistance for needy children was continued. Nurses employed by the schools did the social casework. The Dental Health Council provided the necessary support.
6. *The Teaching Guide for the Fresno City Schools Health Program for Grade I* was used by all teachers of the first grade.
7. *The Teaching Guide for the Fresno City Schools Health Program for Grade II* was used by all teachers of the second grade.
8. A large committee of teachers of the third grade selected by their school principals began planning the teaching guide for the third grade.
9. Physicians, dentists, parents, dieticians, and school administrators worked on the nutrition committee and planned a series of community meetings. The speaker for the meetings was brought to Fresno for a luncheon to which 150 community leaders had been invited. These leaders undertook the job of interesting their respective groups in attending the meetings.
10. The three community lectures on nutrition were well attended and well received. Evaluation of the series produced evidence that they had been a success.

11. All persons connected with the program recognized that dental health is an integral part of and cannot be set apart from general health. As a result, plans of the community and schools were made to coincide with this viewpoint. A committee of elementary principals took the leadership in developing a scope and sequence of health instruction from first grade through sixth grade. The major areas included nutrition, safety and accident prevention, community health, family life education, personality needs, alcohol, narcotics, and personal health. School health services were defined for the entire school system.

1953-54. The same general plan which was followed for the program in 1952-53 was continued in 1953-54 with the same co-operation between school and community in an effort to increase the dental health of children. The in-service education was limited to meetings of teachers in grades one, two, and three. At each of these meetings a panel of teachers and administrators introduced the teaching guide for the respective grades. In addition, basic health education material was distributed to each teacher. The committee of teachers and administrators completed the teaching guide for grade four in accordance with the plan for health instruction previously organized.

Future Plans

The next two years will find working committees developing teaching guides for grades five and six, according to the master plan for teaching health. With the help and guidance of the California State Department of Public Health and the Fresno City-County Public Health Department, a survey will be developed involving the dental inspection of samplings of school children from kindergarten through senior high school. This survey will be completed in the 1954-55 school year. The results will serve as a yardstick to measure the effectiveness of the present project and will determine any future dental program. The survey is planned to provide statistically accurate comparisons for future use.

Evaluation

All the problems connected with dental health in the schools have not been solved, but much progress has been made during the life of the project. This school-community project resulted in bringing about definite improvement in the following areas:

1. *School-Community Relations*—Co-operation and understanding between school and community health groups have been strengthened.
2. *School Personnel Concern*—Greater interest on the part of administrators and teachers in the total health program has been evident.
3. *Children's Eating Habits*—Parents report that children are eating smaller amounts of refined sugar and starch.
4. *School Lunches*—School lunches have improved. The amount of refined sugar and starch has been curtailed.
5. *Dental Health Habits*—Dental habits such as brushing of teeth or rinsing the mouth when brushing is not possible are improved.
6. *Public Relations*—The public relations program has effectively interpreted the health program of the school to the community.
7. *Community Awareness*—A new community concern for the health and welfare of children is evident.

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